IBPS PO PRELIMINARY GRAND TEST : IPP-170631 - HINTS AND SOLUTIONS

ANSWER KEY

1	(3)	21	(5)	41	(5)	61	(1)	81	(1)
2	(5)	22	(3)	42	(1)	62	(1)	82	(2)
3	(4)	23	(3)	43	(2)	63	(3)	83	(1)
4	(1)	24	(3)	44	(4)	64	(2)	84	(5)
5	(5)	25	(2)	45	(3)	65	(3)	85	(1)
6	(1)	26	(1)	46	(1)	66	(4)	86	(3)
7	(3)	27	(4)	47	(4)	67	(2)	87	(1)
8	(3)	28	(1)	48	(5)	68	(1)	88	(3)
9	(4)	29	(2)	49	(1)	69	(5)	89	(2)
10	(3)	30	(5)	50	(4)	70	(4)	90	(3)
11	(2)	31	(2)	51	(3)	71	(1)	91	(4)
12	(4)	32	(3)	52	(1)	72	(3)	92	(5)
13	(1)	33	(2)	53	(2)	73	(5)	93	(3)
14	(5)	34	(2)	54	(1)	74	(3)	94	(1)
15	(3)	35	(1)	55	(5)	75	(1)	95	(1)
16	(3)	36	(2)	56	(1)	76	(1)	96	(2)
17	(2)	37	(3)	57	(5)	77	(5)	97	(3)
18	(3)	38	(1)	58	(1)	78	(5)	98	(3)
19	(1)	39	(3)	59	(3)	79	(4)	99	(4)
20	(2)	40	(2)	60	(5)	80	(1)	100	(5)

1.   (3)   Refer to the first few sentences of the third paragraph.
2.   (5)   None of the given alternatives is correct.
3.   (4)   Refer to the second half of the third paragraph.
4.   (1)   None of (A), (B), (C) is correct.
5.   (5)   None of the alternatives (1), (2), (3), (4) is correct.
6.   (1)   Refer to the last sentence of the third paragraph.
7.   (3)   The answer can easily be inferred from the passage.
8.   (3)   Refer to the last sentence of the passage.
9.   (4)   Only (B) can be inferred from the passage.
10.   (3)   Refer to the second sentence of the passage.
16.   (3)   Substitute 'students' for 'student'.
17.   (2)   Substitute 'to' for 'with'.
18.   (3)   Substitute 'without' for 'unless'.
19.   (1)   Insert 'of' after 'instead'.
20.   (2)   Delete 'so'.

31.   (2)   Let CP = 100

10 units = 100
100 units = 1000
SP of radio = $\frac{112.5}{100} \times 1000$ = Rs. 1125

32.   (3)   For Ist trader = $\frac{1}{5}$ P / CP $SP_1 = 6$

For IInd trader = $\frac{1}{5}$ P / SP_2 CP = 4

To make SP_1 equal to SP_2

	I trader	II trader
CP	$5 \times 5 = 25$	$4 \times 6 = 24$
SP	$6 \times 5 = 30$	$5 \times 6 = 30$

(6 – 5) units = 85
1 unit = 85
30 unit = 30×85 = 2550

33.   (2)   Principal = Rs. 12000
Rate % = 10%
Interest would have been received by person in 5

years $= \frac{12000 \times 10 \times 5}{100} = $ Rs.6000

Interest received by the person after 3 years =
Rs(6000 – 3320) = Rs 2680.
By using formula,

Rate % $= \frac{2680}{12000} \times \frac{100}{3} = \frac{67}{9} = 7\frac{4}{9}\%$

34.   (2)   When interest calculated half yearly
New rate = $\frac{10}{2}$ = 5%, Time = 2 years
Effective rate % = $5 + 5 + \frac{25}{100}$ = 10.25%
Difference in rate = 10.25% – 10% = 0.25%
According to question
0.25% = 180
$100\% = \frac{180}{.25} \times 100$ = Rs. 72000

35.   (1)   C.P of wheat = $30 \times 9.5 + 40 \times 8.5$ = 285 + 340 = Rs. 625
SP of wheat = 70×8.9 = Rs. 623
Loss = CP – SP = 625 – 623 = Rs. 2 Loss

36. (2)

Milk		Water
17	:	3
4 [7 ×3	:	1 ×3
21	:	3

$17 + 3 = 20$ units $= 200$

$4 = \dfrac{200}{20} \times 4 = 40$ ltr

37. (3)

A → 20 ⟍ 3 units/day
        60
B → 30 ⟋ 2 units/day

In 7 days (A + B) do = 7(3 + 2) = 35
C finishes remaining work in 10 days.
C's 1 day work $= \dfrac{25}{10} = \dfrac{5}{2}$ units
C finish the complete work in $\dfrac{60}{\frac{5}{2}} = 24$ days

38. (1) Speed of A, B and C

$= \dfrac{1000}{5}, \dfrac{1000}{8}, \dfrac{1000}{10}$

= 200m/min, 125m/min, 100m/min
Distance travelled by B and C before A starts = 125, 200 metres
Time taken by A to meet B and C

$= \dfrac{125}{200 - 125}, \dfrac{200}{200 - 100} = \dfrac{5}{3}$ min, 2 min.

39. (3) $n - \dfrac{n}{2} - \dfrac{n}{4} - \dfrac{n}{5} = 7$

$\dfrac{20n - 10n - 5n - 4n}{20} = 7$

$n = 7 \times 20 = 140$
The value of n is 140

40. (2) AB = 12, BC = 5
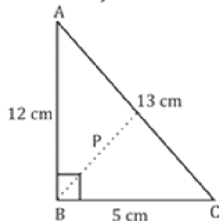
By using Pythagoras theorem
$AC^2 = AB^2 + BC^2$
$AC^2 = 12^2 + 5^2$
$AC^2 = 144 + 25$
$AC = 13$
Area of $\triangle ABC = \dfrac{1}{2} AB \times BC = \dfrac{1}{2} P \times AC$
$AB \times BC = P \times AC$
$12 \times 5 = P \times 13$
$P = \dfrac{60}{13} = 4\dfrac{8}{13}$

41. (5) Mimicry shows held in city M = 0.9
Drama shows held in city O = 12
x % of 12 = 0.9

$\Rightarrow 12 \times \dfrac{x}{100} = 0.9 \Rightarrow x = \dfrac{0.9 \times 100}{12} = 7.5\%$

42. (1) Average number of entertainment shows held in city

$P = \dfrac{11.3 + 6 + 18 + 1 + 1.5}{5} = 7.56$

$\Rightarrow 7.56 \times 100 = 756$

43. (2) Music shows in city N and Q
$= (13 + 12.4) \, 100 = 2540$

Increases by 5% $= 2540 \times \dfrac{105}{100} = 2667$

44. (4) Dance shows held in city N = 12.4 × 100 = 1240
Drama shows held in city R = 9.8 × 100 = 980

Ratio $= \dfrac{1240}{980} = 62 : 49$

45. (3) Total number of standup comedy shows held in all the cities together
$= (0.8 + 2 + 0.3 + 1 + 3 + 0.7) \times 100$
$= 7.8 \times 100 = 780$

46. (1) Req. % increase $= \dfrac{(5 - 2)}{2} \times 100 = 150\%$

47. (4) Req. % $= \dfrac{6}{(3 + 5 + 6)} \times 100 = 42\dfrac{6}{7}\%$

48. (5) Req. expenditure = 14 − 6 = ₹ 8 lakhs

49. (1) Req. increase $= \dfrac{(3 - 2)}{2} \times 100 = 50$

50. (4) Profit made by company C in the year 2013 is not given.

51. (3) Req. number $= \dfrac{22}{100} \times 1050 = 231$

52. (1) Req. answer
$= (16 + 20) \% \text{ of } 2450 - (16 + 20) \% \text{ of } 1050$

$= \dfrac{36}{100} \times 2450 - \dfrac{36}{100} \times 1050 = 882 - 378 = 504$

53. (2) Req. ratio $= \left(\dfrac{30}{100} \times 2450\right) : \left(\dfrac{24}{100} \times 1050\right) = 35 : 12$

54. (1) Req. % $= \dfrac{\dfrac{18}{100} \times 1050}{\dfrac{10}{100} \times 2450} \times 100 \approx 77 : 14$

55. (5) Req. answer = (20 + 30) % of 2450 = 1225

56. (1) $5x^2 + 6x + 1 < 0$
$\Rightarrow 6x^2 + 3x + 2x + 1 < 0$
$\Rightarrow (2x + 1)(3x + 1) < 0$

$\Rightarrow \left(x + \dfrac{1}{2}\right)\left(x + \dfrac{1}{3}\right) < 0 \Rightarrow -\dfrac{1}{2} < x - \dfrac{1}{3}$

57. (5) From equation I : $x^2 = 9 \Rightarrow x = \sqrt{9} = \pm 3$

From equation II : $y^2 + 8y + (4)^2 = 0$

$\Rightarrow (y + 4)^2 = 0$

$\Rightarrow y = -4 \qquad\qquad \therefore x > y$

58. (1) From equation I : $4x^2 + 12x - 2x - 6 = 0$

$\Rightarrow 4x(x + 3) - 2(x + 3) = 0$

$\Rightarrow (4x - 2)(x + 3) = 0 \qquad \therefore x = -3 \text{ or } \dfrac{1}{2}$

From equation II : $y^2 - 5y + 6 = 0$

$\Rightarrow (y - 3)(y - 2) = 0$

$\Rightarrow y = 3 \text{ or } 2 \qquad \therefore y > x$

Hence, $x < y$.

59. (3) $\pi r^2 \times 72 = \dfrac{4}{3}\pi \times (6)^3$ [∵ Volume remains constant]

[Volume of hire $= \pi r^2 h$]

$\Rightarrow r^2 = 4 \Rightarrow r = 2$ cm.

60. (5) Area of rhombus $= \dfrac{1}{2} \times 3x \times 4x = 6x^2$

Square of the shorter diagonal $= 3x = 9x^2$

$\therefore$ Req. ratio $= \dfrac{6x^2}{9x^2} = \dfrac{2}{3}$

61. (1) Suppose cost price = ₹ 100

$\therefore$ Marked price ₹ 130

After 20% discount, selling price

$= 130 \times \dfrac{80}{100} = $ Rs.104

$\therefore$ Profit percentage $= \dfrac{104 - 100}{100} \times 100 = 4\%$

62. (1) $(41)^2 + (8)^2 - (22)^2 = x$

$\Rightarrow 1681 + 64 - 484 = x$

$\Rightarrow x = 1261 \simeq 1280.$

63. (3) $\dfrac{40}{100} \times 600 - 250 = x - \dfrac{77}{100} \times 910$

$\Rightarrow 240 - 250 = x - 77 \times 9$

$\Rightarrow x = 683 \simeq 700$

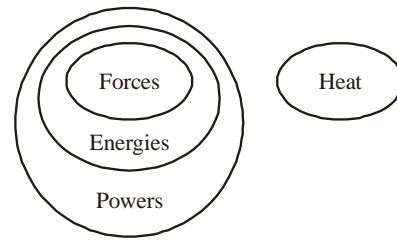64. (2) $\dfrac{52000}{60} \times \dfrac{29}{41} = x \Rightarrow x = 600$ (approx.)

65. (3) $\dfrac{700}{52} \times \dfrac{700}{11} \times \dfrac{112}{107} = 896 \simeq 900.$

66. **(2)** According to the statements, venn diagram is as follow

Exams Tests Question

Conclusions: I. ✗   II. ✓

Hence, only Conclusions II follows from the given statements.

67-68. According to the statements, venn diagram is as follow

Forces — Heat
Energies
Powers

67. (2) **Conclusions:**   I. ✗   II. ✓

Hence, only Conclusions II follows from the given statements.

68. (1) **Conclusions:**   I. ✓   II. ✗

Hence, only Conclusions I follows from the given statements.

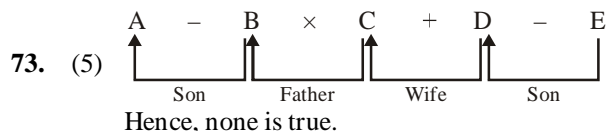**69-70.** According to the statements, venn diagram is as follow

Note
Plastices — Coin Metals
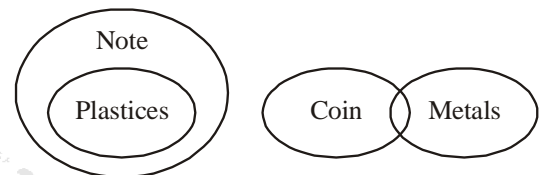
69. (1) **Conclusions:**   I. ✓   II. ✗

Hence, only Conclusions I follows from the given statements.

70. (1) **Conclusions:**   I. ✓   II. ✗

Hence, only Conclusions I follows from the given statements.

71. (1)

Granddaughter

L ÷ M × O − P + Q

Daughter   Father   Son   Daughter
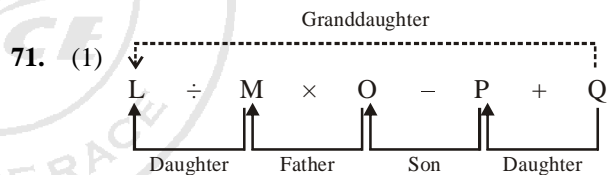
From the above figure, it is clear that L is granddaughter of Q.

72. (3) On putting sign (−) in place of question mark (?)

Nephew

Q − R + S × T

Son   Daughter   Father
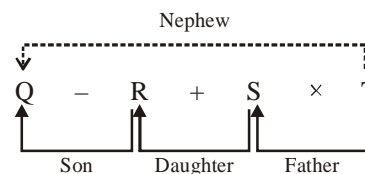
From the above figure, it is clear that Q is the nephew of T.

73. (5)

A − B × C + D − E

Son   Father   Wife   Son

Hence, none is true.

74-79.

Name	Firm	Week off	Profession	City
A	Government	Monday	Doctor	Chennai
B	Government	Friday	Engineer	Bangalore
C	Government	Tuesday	Pharmacist	Hyderabad
D	Private	Thursday	Lawyer	Mumbai/Jaipur
E	Private	Wednesday	Counselor	Jaipur/Mumbai

80. (1) From I : rut a ab → clean clear home ...(i)
ta ha na → home is beautiful ...(ii)
From I and II : home → ta
From II : tu ma abo → flowers are white ...(iii)
ea ta qa → clean sheets shades ...(iv)
From III : ru qa mo → nice clear sheets ...(v)
abo ha qi → white deep light ...(vi)
From I and III : using eqns (i) and (v) ru → clear

81. (1) From I

T ⟺ R
|
S

From II N and O are brothers of S.
From III There is only couple and T has only one daughter out of 3 children.
From III There are five persons in the family.

82. (2) From I
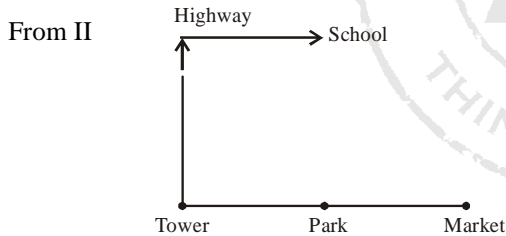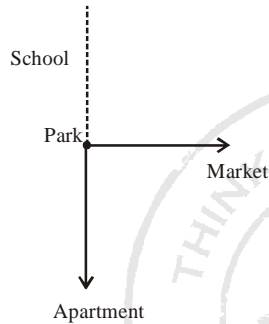
And distances are not given.
From I and II school is north direction from park.

83. (2) From I, S is not at opposite of P. P is on the left of Q. R and T are sitting exactly opposite to each other.
From II, when P and U exchange their seats. P becomes beside and left of T.
From III, when P and T exchange their seats, and then T is on the immediate and then T is no the immediate left of R.
From I and II
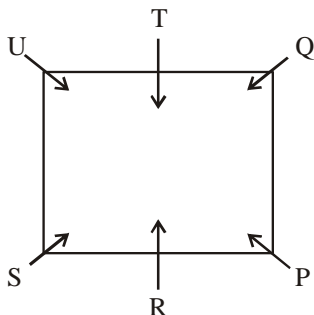
84-88. Monday - Mathematics
Tuesday - Psychology
Wednesday - Chemistry
Thursday - Computer
Friday - Biology
Saturday - Physics
Sunday - English

84. (5)　　　　　　**85.** (1)
**86.** (3)　　　　　　**87.** (1)
88. (3)

89-93.
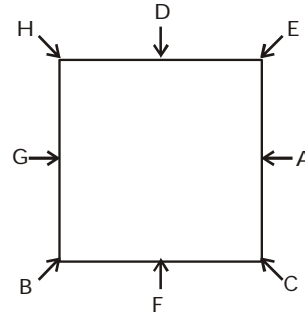
89. (2)　　　　　　**90.** (3)
91. (4)　　　　　　**92.** (5)
93. (3)

94-98. Environmental information is here → tu fa lic li ...(i)
Here read given important → pi sa uic fa ...(ii)
Awareness is necessarily important → uic hi li no ...(iii)
Necessarily given environmental questions → xo lic pi hi ...(iv)
From (i) and (ii) here → fa ...(v)
From (ii) and (iii) important → uic ...(vi)
From (i) and (iii) is → li ...(vii)
From (iii) and (iv) necessarily → hi ...(viii)
From (ii) and (iv) given → pi ...(ix)
From (ii), (v), (vi) and (ix) read → sa ...(x)
From (i) and (iv) environmental → lic ...(xi)
From (iv), (viii), (ix) and (xi) questions → xo ...(xii)
From (iii), (vi), (vii) and (viii) awareness → no ...(xiii)
From (i), (v), (vii) and (xi) information → tu ...(xiv)

99-100.
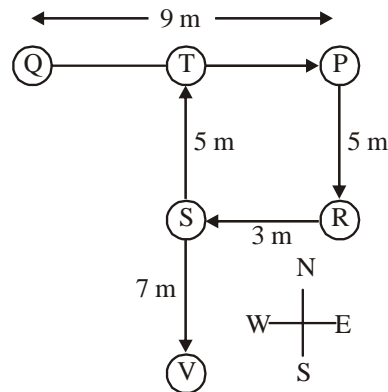
99. (4) If a person walks in a straight line for 8 m towards West from Point R, then he would be cross S.
100. (5) S, V, T are in straight line.